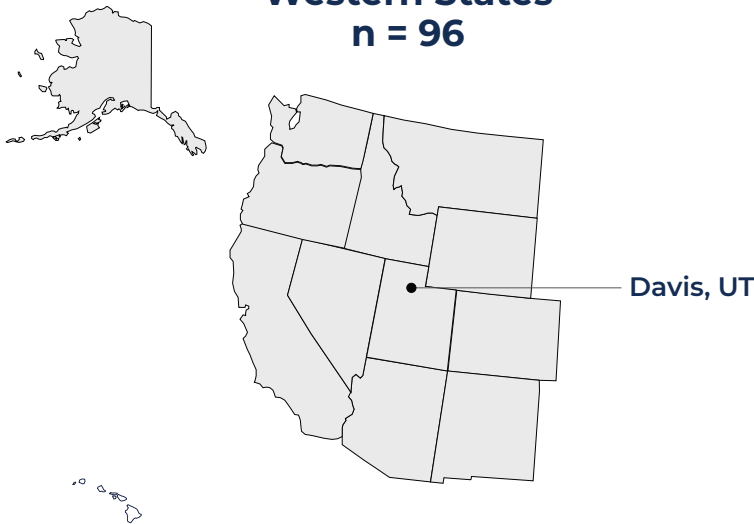


NDEWS Special Report EMS encounters involving nonfatal carfentanil overdoses January 1, 2023 - January 31, 2026

Nationally, 4,515 EMS encounters involving nonfatal carfentanil overdoses were recorded from January 1, 2023 to January 31, 2026. Of these national encounters, 96 (2.1%) occurred in Western states, 97 (2.1%) in Midwestern states, 459 (10.2%) in Southern states and 3,863 (85.6%) in Northeastern states. Counties with ≥ 10 encounters are presented below as encounters per 10,000 population; counties with fewer than ten encounters have been suppressed.

US Counties with the highest rates of non-suppressed reports of EMS encounters involving nonfatal carfentanil overdoses per 10,000 population January 1, 2023 - January 31, 2026

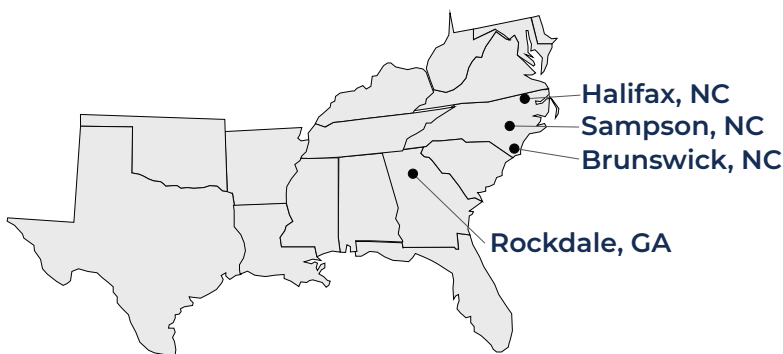
Western States n = 96



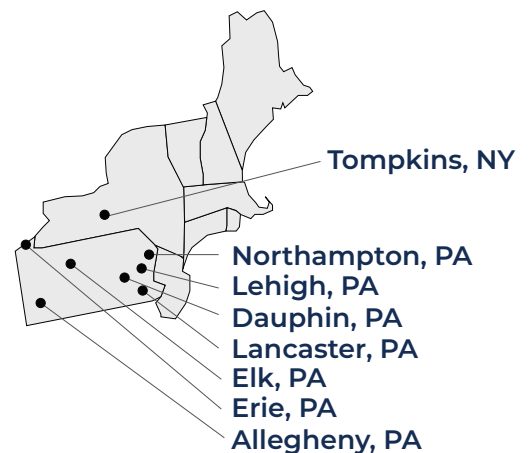
Midwestern States n = 97



Southern States n = 459



Northeastern States n = 3,863



**US Counties with the highest rates of non-suppressed reports
of EMS encounters involving nonfatal carfentanil overdoses
per 10,000 population
January 1, 2023 - January 31, 2026
n = 4,515**

**Western States
n = 96**

**Midwestern States
n = 97**

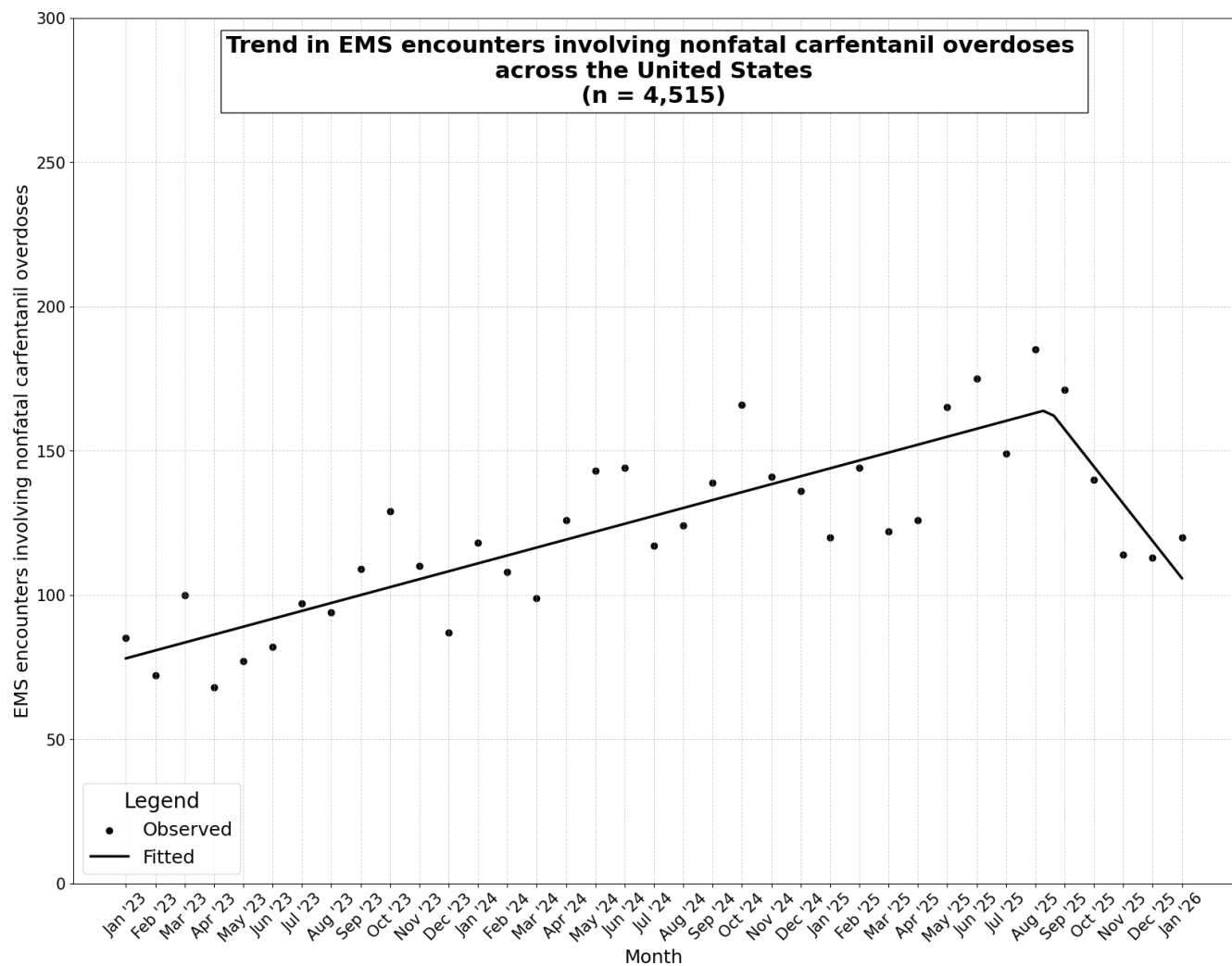
County*	EMS encounters per 10,000 population	County*	EMS encounters per 10,000 population
Davis, UT	1.36	St. Clair, MI	1.13
		Ramsey, MN	0.26
		Wayne, MI	0.11

**Southern States
n = 459**

**Northeastern States
n = 3,863**

County*	EMS encounters per 10,000 population	County*	EMS encounters per 10,000 population
Brunswick, NC	18.25	Allegheny, PA	26.8
Halifax, NC	9.7	Tompkins, NY	15.93
Sampson, NC	2.52	Northampton, PA	5.03
Rockdale, GA	2.09	Elk, PA	3.38
		Erie, PA	2.65
		Lancaster, PA	2.44
		Dauphin, PA	0.39
		Lehigh, PA	0.35

*Note: Colors reflect EMS encounters grouped by state



A significant decline ($\beta = -0.118$, $p = 0.0138$) in EMS encounters involving carfentanil was observed. Joinpoint regression identified a change point occurring in August 2025.

****Methodology:** Trends in EMS encounters involving nonfatal carfentanil overdoses were examined using joinpoint regression. This method fits weighted least-square regression models to EMS encounters on a log transformed scale. It also uses Monte Carlo permutation tests with a Bonferroni correction for multiple testing and identifies models with the best-fit set of joinpoints. These are points (or knots) in trends that indicate significant shifting points. Poisson models were specified under the assumption of non-constant variance or heterogeneity over time. Only the national model is shown due to suppression of regional data.

EMS encounters involving nonfatal carfentanil overdoses were included if the encounter involved an emergency response with patient contact, contained a documented mention of carfentanil in the patient complaint or narrative (including common misspellings). The EMS encounters were identified according to the Rhode Island Department of Health's definition of a nonfatal opioid overdose.

All dispatch types above follow the guidelines set by the National Emergency Medical Services Information System (NEMSIS).

Limitations: Biospatial.io data reflect pre-hospital EMS encounters and do not include hospital outcomes, or toxicology confirmation. Much of the data relies on clinical impressions, self-report, or bystander accounts. Additionally, EMS encounters involving nonfatal carfentanil overdoses may be underreported, overreported, or misclassified.